TRANSACTIONS

OF THE

NEW YORK SURGICAL SOCIETY.

Stated Meeting, January 10, 1906.

The President, Dr. GEORGE WOOLSEY, in the Chair.

OPERATION FOR EPITHELIOMA OF THE HEEL.

DR. CHARLES L. GIBSON presented a man, 58 years old, who ten years ago had his left leg amputated below the knee for a condition which he was told was a cancer.

The lesion on the right heel was first noticed about a year ago. It appeared as a scaling of the heel, and then became papular. When Dr. Gibson saw the patient, in the summer of 1905, there was an ulcerating lesion of the right heel, about two and a-half inches in circumference. It proved to be an epithelioma. Dr. Gibson performed an atypical operation, which consisted in a removal of an oblique wedge of the posterior portion of the os calcis, together with the tumor. The tendo achillis, which had been divided, was lengthened by splitting it downward from the middle of the calf, and nailed to the lower end of the sawn surface. An autoplastic flap, designed eventually to cover the bone was now made by reflecting the skin towards the popliteal space; another flap was detached from above downward, and the free ends were sutured together. It was intended eventually, after firm union had taken place between these two flaps, gradually to sever the pedicle of the upper flap, when this whole flap would be turned downward and the free end sutured to the lowest level of the defect of the heel.

Unfortunately, there was not enough circulation in the extremity to warrant such a procedure, as the flaps failed even to unite.

The defect was subsequently remedied in part by skin grafting on several occasions.

Such an autoplastic operation had the patient's circulation been suitable, should have been very efficient, and in a suitable case is to be recommended. The wound is not quite healed, but the patient already has considerable use of the limb.

DR. GEORGE WOOLSEY narrated the history of a case where epithelioma developed at the site of an old ulcer of the leg, at the junction of the middle and lower thirds; the growth was thoroughly excised, and skin-grafts applied. The operation was followed by an early recurrence. Another surgeon then performed a similar operation with a like result, and the leg finally had to be amputated.

SARCOMA OF THE NECK TREATED BY MEANS OF THE MIXED TOXINS OF ERYSIPELAS AND BACILLUS PRODIGIOSUS.

DR. WILLIAM B. COLEY presented a man, 32 years old, who was referred to him on October 17, 1905, by Dr. Arpad G. Gerster, as an inoperable case of recurrent, small, round-celled sarcoma. His family history was good. His personal history was as follows:

In about the middle of August, 1905, he noticed a swelling on the left side of the neck, just behind the sterno-mastoid muscle, At about the same time he also noticed an enlargement of his left tonsil; there was no pain at first, but as both tumors increased rapidly in size, they soon became painful. In the latter part of August, 1905, the patient was operated upon at St. Mark's Hospital by Dr. Carl Beck, who made an attempt to remove the tonsil tumor, as well as that of the neck, he found it impossible, however, to make a complete excision. The patient was immediately put upon the X-ray treatment every other day, and also received radium treatment externally and internally; the latter, however, had little if any influence in checking the rapid growth of the tumor. On October 13, while under the care of Dr. Goldwater at the New York Polyclinic, a portion of the tonsillar tumor was removed and examined by Dr. F. M. Jeffries, Prof. of Pathology and Director of the Pathological Laboratory of the New

York Polyclinic, and also by the Practitioner's Laboratory, both of whom reported the tumor to be a small, round-celled sarcoma. On October 17, when Dr. Coley first saw the patient, physical examination showed the following condition:

The left side of the neck was occupied by a globular tumor, about the size of half an orange; it extended from the angle of the jaw in front, to the mastoid process behind, and downwards nearly to the clavicle. Its consistence was about the same as that ordinarily found in round-celled sarcoma; the skin was not adherent. Examination of the left tonsil showed it to be enlarged to double its normal size. The patient's general health had been but little affected. He was admitted to the General Memorial Hospital on October 17, 1905, and immediately put upon the mixed toxins of erysipelas and bacillus prodigiosus, without any other treatment. Daily injections were given, alternating, one day into the tumor direct; the other, into the pectoral region. The highest dose given was seven minims. His temperature ranged between 99.5° and 103°. In less than a week there was decided decrease in the size of the tumor, and an increase in its mobility. The diminution steadily continued and at the end of six weeks, both the cervical and tonsillar tumor had apparently entirely disappeared. The patient was shown before a meeting of the Harlem Medical Society on November 25, 1905. He left the hospital at the end of seven weeks, and although there were no visible remains of the tumor, the toxins had been kept up twice a week in the pectoral region, as a prophylactic measure against further recurrence.

It was interesting to note that the toxins used in this case, prepared by Dr. B. H. Buxton, of the Loomis Laboratory, were eight months old.

Dr. Howard Lilienthal said that some weeks ago he had seen the case reported by Dr. Coley, and at that time there was considerable brawny infiltration present, which he supposed was due to the injections. This had now apparently disappeared, and the cure seemed, for the present, at least, to be complete. The speaker said that while he did not favor the use of the mixed toxins in operable cases, he thought the remedy should always be resorted to in dealing with inoperable conditions, and as a postoperative prophylactic measure, especially in sarcomata of the spindle-celled

variety. He had every reason to believe that he had delayed and in some cases prevented the recurrence of these malignant growths by this method. In one case of cysto-sarcoma of the rib involving the pleura, in which only a partial excision of the malignant growth was possible, the injection of Coley's fluid was apparently followed by an absolute cure. Between three and four years had now elapsed since the operation without any signs of a recurrence.

DR. WOOLSEY said that he had tried the mixed toxins, either alone or in combination with the X-rays as a prophylactic measure after operation, and thus far he had never seen much benefit in sarcoma of the round-celled variety. He mentioned the case of a small boy with a sarcoma in the carotid region. There were a number of recurrences, and after the growth had been removed for the fourth time the mixed toxins and X-rays were given as a prophylactic measure, but without any result. In the spindle-celled variety, the speaker thought the treatment offered a better chance of cure.

DR. COLEY, in closing, said that his earlier opinion, that most of the cures by means of the toxins were found in the spindle-celled variety of sarcoma, and that the toxins were but seldom successful in the round-celled variety, had not been borne out by the facts. His own cases, recently collected, showed of 34 successful cases, 16 spindle-celled, 12 round-celled, two mixed-celled, one epithelioma, and three in which no microscopical examination was made, although the clinical appearances, together with a history of recurrence, left little doubt as to the diagnosis. Of 56 cases treated successfully by other surgeons, 17 were of the round-celled, and 14 of the spindle-celled variety.

Dr. Coley said he believed very strongly in the wisdom of adopting the plan advocated by Dr. Lilienthal; namely, to use the toxins after operation in all cases of primary sarcoma as a prophylactic against recurrence. The speaker said he had done this in a considerable number of cases for several years, and he believed that in many instances the measure had prevented a recurrence.

FRACTURE OF THE FEMUR.

DR. ROYAL WHITMAN reported the case of a boy who entered the Hospital for Ruptured and Crippled in September, 1905. Five weeks before he had sustained a fracture of the left thigh.

The limb was put up in plaster-of-paris by the family physician, and when this was removed, at the time of the boy's admission to the hospital, there was considerable deformity and shortening, and over-lapping of about 1½ inches. Under an anæsthetic after considerable manipulation and stretching, the fragments were brought into apposition, and a plaster-of-paris spica bandage applied, together with traction plasters, in order to prevent recurrence of deformity.

The bones united readily, and the boy now had a perfect limb. The chief point of interest in the case was the fact that the shortening of the limb had been successfully overcome five weeks after the receipt of the injury.

"THROMBOSIS OF THE MESENTERY."

Dr. Charles L. Gibson spoke of two cases of the kind that had come under his observation. The first one he saw with Dr. Blake about fifteen years ago. The patient was a man who had been an inmate of the hospital for some time with an inveterate syphilitic ulcer which failed to heal, and one day he suddenly developed an attack of complete abdominal obstruction. Upon opening the abdomen, the condition described by Dr. Hawkes was found, the section of the gut involved having been reduced to a soft, gelatinous mass. The patient promptly died.

The second case was also a man, who was admitted into the medical ward of the hospital with the symptoms of acute pyæmia. The abdominal symptoms, in the beginning, were not prominent. He had chills, and his temperature ranged as high as 106° F. There was a cardiac bruit, and the case was supposed to be one of malignant endocarditis. Subsequently, he developed acute abdominal symptoms, and on exploring the abdomen, the lower coils of intestine were found to be in this same gelatinous condition. That patient also died.

Dr. Gibson said the only suggestion he could make in the line of treatment was in a prophylactic way. We knew that this condition occasionally occured, and its possibility should influence the surgeon to handle the mesentery with the greatest respect in the course of intra-abdominal work.

Dr. Joseph A. Blake said that about a year ago a man entered the hospital from up the state. He had a fistula leading to

the small intestine, and gave a history of thrombosis of the mesentery, from which he had recovered. It was apparently one of those cases in which the circulation of the gut had not been completely cut off, and the surgeon in whose hands he fell did the very best thing under the circumstances, and made an artificial anus in the small intestine. According to a letter received from the operating surgeon, several feet of intestine were involved and the lesions in the mesentery and intestine were typical. The speaker said this was the only case he knew of which did not end fatally.

Dr. Blake said he recently saw a case of mesenteric thrombosis following an operation for appendicitis. The appendix was seven inches long. Following the operation, which was done towards the end of the attack, the wound became infected. This was relieved by taking out a couple of stitches. The patient's temperature then fell to normal, and remained so for five days and during that period there still remained slight abdominal pain and tenderness. The appetite was fair; there was some diarrhœa. The patient appeared to be getting well, when he suddenly developed acute symptoms of intestinal obstruction, and when Dr. Brewer opened the abdomen he found a gangrenous area in the ileum several feet from the ileo-colic junction, with adhesion to the abdominal wall, and a slight perforation. There was nothing to explain the condition unless it was a thrombosis of the mesenteric artery or vein, which had extended so as to cut off the circulation in this part of the intestine. A resection was done, but it proved of no avail.

Dr. Howard Lilienthal said he had seen several cases of mesenteric thrombosis following appendicitis operations, all of which went on to a fatal termination, but without the occurrence of gangrene of the intestine. The speaker said he did not know to what extent the mesentery was involved in these cases, but it was found, on operation, that it was thickened and œdematous, and obviously thrombosed. Dr. Lilienthal said that personally he had never seen any of these cases get well, but he recalled one case, a private hospital patient under the care of Dr. Gerster, who after a prolonged and severe illness finally recovered. During the course of his illness, the liver became swollen to such an extent that hepatic abscesses were suspected, and the suggestion to

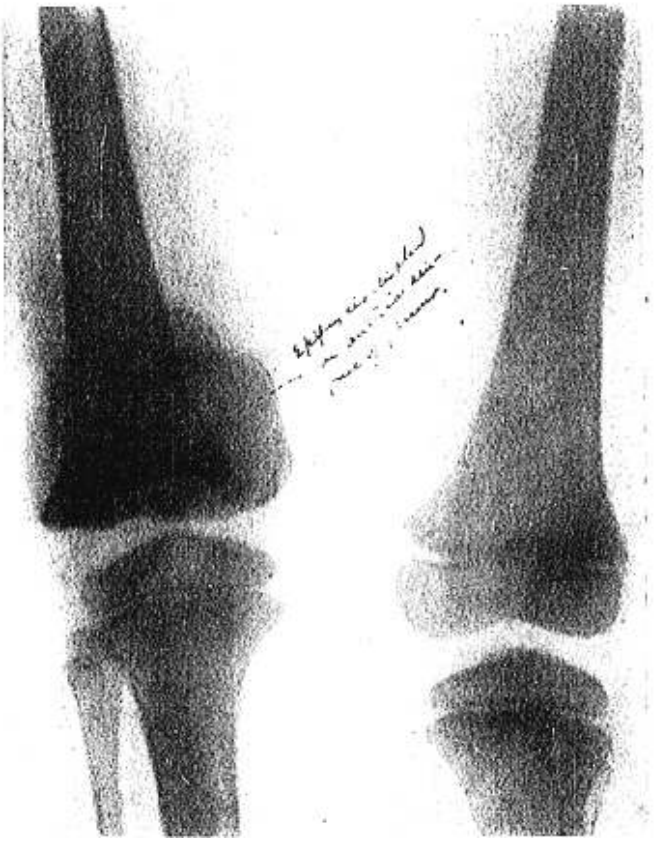

FIG. 1.—Radiograph of normal and injured extremities taken July 10, 1904, two months after injury. Anteroposterior view.

FIG. 2.—Lateral view two months after injury. (Note—The spots are plate defects.)

incise the liver was made to Dr. Gerster, but he refused to interfere, and the patient eventually got well.

In thrombosis of vessels of considerable size, gangrene was of course inevitable.

DR. HAWKES, in closing, in reply to Dr. Lilienthal, said it depended to a great extent on the amount of mesentery that was thrombosed as to whether or not a collateral circulation could be established.

Stated Meeting, January 24, 1906

The President, Dr. GEORGE WOOLSEY, in the Chair.

OPEN OPERATION FOR SEPARATION OF LOWER FEMORAL EPIPHYSIS.

DR. JOHN A. HARTWELL presented a boy, seven years old, who, on May 28, 1904, fell in front of a wagon, the wheel of which passed over his left thigh just above the knee-joint. He was taken to a hospital, and examination on admission showed every evidence of a fracture near the lower end of the femur. A few days later, under ether, the limb was put up in a plaster splint, in what was regarded as a favorable position to prevent shortening. This splint was left on for about a month, and upon its removal it was found that union in a faulty position had taken place.

Dr. Hartwell first saw the patient about this time, in the Second Surgical Division of Bellevue Hospital. An examination of the left lower extremity showed a shortening of over an inch, with the knee-joint practically immobile in a slightly flexed position. There was much thickening about the lower end of the femur, and the exact condition was not readily made out. The radiograph, however, showed the injury to be a separation of the lower femoral epiphysis, that fragment being dislocated on the anterior surface of the shaft of the bone, and riding upward for the distance of its thickness—*i.e.*, about an inch and a half. (Figs.

1 and 2.) The lower end of the upper fragment was thus forced down into the popliteal space.

On July 30, 1904, an incision about an inch and a-half long was made along the outer side of the knee-joint, extending from the head of the fibula upward. The incision was carried down to the bone, the joint structure being retracted downward, so that the joint, apparently, was not opened. The periosteum was then stripped from the lower end of the femur upward for a distance of about four inches from its anterior, external and posterior surfaces. The lower end of the shaft was found imbedded in the popliteal tissue, with the epiphysis completely separated from it, and lying directly on its anterior surface, with the condyles looking forward and downward. The separated surface of the epiphyseal end was thus in close contact with the anterior surface of the lower end of the shaft, to which it was united by a firm callus. By the use of a large carpenter's chisel, a few blows of the mallet separated the two fragments, and then, with blunt, flat instruments and curved hooks appli to the two fragments, the epiphysis was gradually slid down to its normal position against the lower end of the shaft, where it rested with very little tendency to a recurrence of the deformity, the surface of the condyles now looking in the normal direction.

It was now possible to flex the leg on the thigh well toward a right angle without dislocating the fragments, showing that the interference with mobility had been removed. The periosteum and other soft parts were then sutured in position and a moderate-sized drain inserted down to the bone, and a copious sterile dressing applied. The joint was believed to have been unopened. A plaster splint was then applied with the leg in the extended position, including the whole lower extremity, with the pelvis.

The subsequent convalescence was by no means satisfactory. The superficial wound became infected rather severely, which kept it open for several weeks. The infection, fortunately, did not seem to lead down to the bone, and at no time was there any evidence of involvement of the joint in this process. The wound healed slowly by granulation; at the end of five weeks it had completely cicatrized, and union of the bony fragments was complete.

Owing to the presence of the suppuration, and fearing that the process had interfered with bony union, no attempt had been made up to that time to bend the joint, so that it was then firmly fixed in an extended position. Under ether, the knee was flexed seven weeks after the operation, and about three weeks after the cessation of all suppuration. The trauma inflicted by this manipulation again started up the suppurative process, necessitating extensive incisions on both sides of the joint. The acute symptoms subsided rapidly, and a short time afterwards a very small fragment of bone was discharged, showing that the original process had undoubtedly communicated with the bone at some point. The wound then healed by granulation (and on December 3, when the boy was about to be discharged, he contracted erysipelas at the site of a small abrasion over the middle of the left tibia. This responded readily to treatment, and he left the hospital ten days later, five months after the original operation.

In spite of the infectious complications that had occurred, no serious damage had resulted to the bone or the knee-joint, the latter having been without any restraint since the removal of the splint, five weeks after the operation. While no attempt had been made to limber the joint by passive manipulation, the patient had been encouraged to use it as much as possible.

The following note was made upon the condition of the joint on January 4, 1905: The contour of the left knee was uniformly enlarged, the enlargement being slightly more marked on the internal aspect. Extension could be carried to within about 30 degrees of the normal, and flexion to about two-thirds of the way to a right angle, the arc of motion being about 30 degrees. The left lower extremity, in as full extension as possible, measured, from the anterior superior spine to the internal malleolus, 22 inches. The right extremity measured the same in the same position. The circumference of the left knee was eleven inches; of the right, ten and one-eighth inches.

On March 7, 1905, the length of both lower extremities had increased by half an inch, and the patient's total height was forty-five and a-half inches. The left knee could be fully extended, and flexed to a right angle. The patient walked without limping.

On January 8, 1906, the right lower extremity, as taken above, measured twenty-three and three-quarters inches; the left the same. The patient's total height was forty-seven and a-half inches. The knee could be flexed to about 30 degrees beyond a right angle, and extension was complete. The anatomical landmarks about the knee seemed to be in a normal relation. (Figs. 3 and 4.) Thus, in one year since his discharge from the hospital, the patient's lower extremities had each grown one and three-quarters inches, showing that there was no impairment of growth as the result of the injury to the lower femoral epiphysis, and the mobility of the joint had become about normal.

Dr. Hartwell said the interest in this case did not attach to its rarity, as more than one hundred cases of this injury are reported in the literature, and all the epiphyseal separations, the one at the lower end of the femur is the most common. The rule, too, was to find the displacement exactly as was met with here. The interesting feature of the case lay rather in the fact that the displacement of the separated epiphysis was not corrected for more than two months after the accident, and that notwithstanding this fact, there had been no loss of growth of the injured limb.

Scudder, in speaking of this injury, made the following statement: "If the epiphysis is separated without great laceration and periosteal denudation, and is replaced soon after the injury, the chances are that there will be a minimum amount of shortening." Stimson also speaks of the liability of the arrest of growth, though with proper correction of the displacement this is not the rule. The great resistance to any interference of the growth was well illustrated in this boy, where the original trauma was very severe, where replacement was so long neglected, and where extensive suppuration took place immediately at the site of the fracture line, if not actually involving it.

Dr. Howard Lilienthal said he had never seen a case like the one reported by Dr. Hartwell, in which there was separation of the lower femoral epiphysis. In dealing with such a condition, it was certainly a serious mistake to regard it as a fracture, and simply put the limb in a plaster splint. The result in Dr. Hartwell's case was excellent, and evidently the growth of the limb

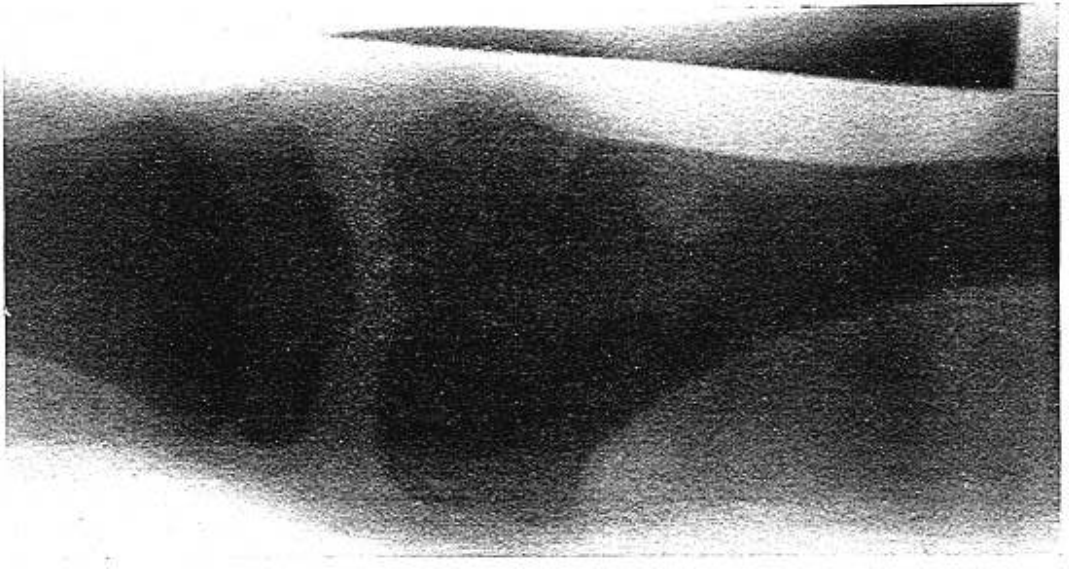

FIG. 3.—Radiograph taken Jan. 8, 1906, eighteen months after operation, showing normal position of epiphysis. Anteroposterior view.

FIG. 4.—Same as Fig. 3. Lateral view.

had not been interfered with, in spite of the delay in correcting the deformity and the suppurative process that complicated the boy's convalescence.

PERINEAL PROSTATECTOMY.

Dr. Charles L. Gibson presented three men who had been subjected to perineal prostatectomy within the past four to six weeks, and who were aged, respectively, 84, 63 and 59 years. In each case the wound was healed, or practically so, the control was perfect, there was no residual urine and no cystitis.

Previous to adopting his present technique, Dr. Gibson said, he had been dissatisfied with his results by any of the methods, suprapubic, and combined suprapubic and perineal, with or without the formal exposure of the prostate by a transverse dissection of the perineum. In the last two years he had had no mortality, although many of his patient were far from good risks.

With regard to the technique used, Dr. Gibson said it had been as follows on all cases operated on for the past two years: An external urethrotomy was performed, then, in some cases, particularly stout individuals. Young's tractor was introduced, while, in thin persons, suprapubic pressure sufficed. Then, after division of the recto-prostatic septum or the recto-urethralis muscle with the scissors, the prostate was enucleated in one of three ways: (*a*) In toto, as in Case I, being very easily shelled out of its surroundings; (*b*) the lateral lobes were peeled off of the urethra by beginning the enucleation behind the prostate, and working from behind forward; (*c*) piecemeal extraction was adopted in dealing with very large growths, working from the urethrotomy opening towards the periphery or capsule.

Dr. Gibson said that in none of these operations had hæmorrhage ever been a serious factor, nor had there been any damage to the rectum. Drainage was provided by a large rubber perineal tube, well surrounded by sterile gauze packing. The tube was removed at an early date, and the patient was allowed to leave his bed in eight days.

Dr. Parker Syms said that the method described by Dr. Gibson was essentially the one which he had employed in all excepting his first case. He makes a median perineal incision

and reaches the prostate, as suggested by Alexander, through an incision in the so-called prostatic sheath. He always exposes and recognizes the sheath and prostate by sight.

The speaker said that while all enlarged prostates may be removed by this method, yet in some cases, enucleation will be much easier than in others. In one recent case he removed the prostate in a single piece, and the procedure had occupied but a few moments, but after the tube was removed, the patient had been unable to pass urine on account of papillomata which were just within the bladder neck. These had to be removed a few days later. This shows that one should very carefully explore the bladder orifice.

Speaking of the after-treatment of these cases, Dr. Syms said he always removes the tube at the end of forty-eight hours, and that he always gets the patient out of bed at that time, unless there was some special reason for keeping him there longer.

In the final healing of these wounds, he had often met with considerable difficulty, especially during the later weeks. This seems to be due to the fact that the healing proceeded from without much quicker than from within, with a tendency toward pouch formation.

Dr. Syms said that his results from perineal prostatectomy had been most satisfactory, and it was only in exceptional cases that complications arose. He regarded the perineal method of approach as the most simple and direct; it involved the least number of important organs and gave the patient the most rapid and safe convalescence.

Dr. Syms said the so-called method of Young, so far as the exposure of the prostate was concerned, was first described by the French surgeons, Albarran, Proust, and others; and that this method of exposing the prostate had resulted in the formation of more rectal fistulæ than any other. In the elaborate dissection that it required, one was very liable to wound the rectal wall.

Dr. Hotchkiss said he was glad to see the results in Dr. Gibson's cases of perineal prostatectomy, because he had felt for a long time that the perineal operation done through a small median perineal cut, and largely by the sense of touch instead of

sight, was for some reason less liable to be complicated by accidental injuries of the rectum, and the consequent fistula, than some of the more elaborate methods of exposure by the curved transverse incision, and dragging down the prostate by a metallic tractor within the bladder. In fact, the only case in which a rectal fistula had resulted in his own practice was in one where such an incision and a careful exposure of the tumor was made. He had first done the operation through the median perineal incision in 1896, enucleating the prostate easily with the finger by finding the planes of cleavage on either side of the urethral incision.

Dr. F. Kammerer said he always did the perineal operation, and in only one instance had he met with the accident of wounding the rectum. He usually made the curved incision across the perineum which he did not think added to the difficulties of the operation, as it usually enabled him, within a very few minutes, to get down to the prostate when assisted by the left index in the rectum. He considered it wise to lay open the field of operation for inspection. In the case where the rectum was wounded the patient had been improperly prepared and the rectal pouch in the wound was filled with fecal matter, a rupture occurred before the patient was fully anæsthetized and was vomiting, while a blunt retractor was depressing the rectum and anal region.

Dr. Lilienthal said he had never heard of a rupture of the rectum occurring in the course of a suprapubic operation on the prostate. He thought it only fair that something should be said in favor of that operation. Unlike the perineal method, it never, so far as he knew, resulted in a loss of sexual power, whereas it was well known that many of the perineal operations were followed by total loss of sexual power. He mentioned one case, a man 74 years old, where the suprapubic operation on the prostate was followed by increased sexual power.

Where the perineal operation was contemplated, it was absolutely essential that a preliminary cystoscopic examination be done. This was unnecessary with the suprapubic method, which afforded a perfect view of the interior of the bladder.

An injury to the rectum, which occasionally occurred in the course of a perineal prostatectomy, might not manifest itself for several days, when the rectal tissue sloughed out, leaving a rather hopeless state of affairs. A number of such cases had been

reported. If the accident was discovered at the time of the operation, the perforation could be sutured, but after sloughing occurred, that was out of the question.

Dr. Lilienthal said he had very recently done his thirty-ninth suprapubic prostatectomy. The operation, which was entirely successful, was completed in ten minutes. Of the thirty-nine cases, two died. Those that recovered were able to urinate as well as ever. In all of them, the syphonage method of draining the bladder was employed.

The speaker thought that while in some hands the perineal operation might be preferable to the suprapubic, he had no reason for feeling dissatisfied with the latter. The operation, if properly done, should give a very small mortality. The method possessed peculiar advantages in dealing with very old or feeble individuals who were bleeding. In such cases the bladder could be opened from above in a few minutes, and packed, and then the actual prostatectomy could be postponed for a week or longer, if the patient's condition indicated the wisdom of delay. Such a two-stage operation could not be done through the perineum.

In reply to a question as to the grounds upon which he based his assertion that the sexual powers were preserved by the suprapubic method, Dr. Lilienthal said he did not know. He simply knew from his own experience and from that of others that the sexual power was not impaired by the suprapubic operation, while the loss was comparatively common after the perineal method, even in young men who had been operated on through the perineum for the relief of a prostatic abscess.

Dr. F. Tilden Brown said he agreed with Dr. Gibson that it was of decided advantage, whenever possible, to complete the operation without traction, as it relieved one of the dangers of the metallic tractor, which was very liable to tear through the vesical mucosa. At the same time, there were a certain number of cases in which it would prove extremely difficult to effect enucleation of the enlarged prostate without other aid than suprapubic pressure. In certain instances of that kind, Dr. Brown said, he has found that pressure through the rectal wall with the gloved hand was very satisfactory.

The speaker said that the position advocated by Dr. Gibson, namely, elevation of the pelvis and hyperflexion of the thighs,

was a very important feature of the operative technique. The possibility of injuring the rectal wall was minimized by keeping the patient in this position, and by following the technique of Young and recognizing the landmarks, keeping close to the bulb, with the full understanding that this bulb, on its posterior surface, rises right up to the membranous urethra. The preliminary injection of a 1-1,000 adrenal solution added much to the satisfaction and ease of the dissection, as it obviated the necessity of mopping away the blood or working in the dark with the finger.

DR. GIBSON, in closing, said that his personal experience with suprapubic prostatectomy had been very unsatisfactory, and for that reason he had abandoned it. In regard to the question of the possible loss of sexual power after the perineal method, he looked upon it as a kind of bugaboo which might well be disregarded. Prostatectomy was a life-saving measure; not one of expediency, and the question of saving the sexual power in this class of patients was of secondary importance.

DISARTICULATION AT HIP FOR SARCOMA.

DR. C. A. MCWILLIAMS presented a man, 23 years old, who was operated on in February, 1900, by Dr. Charles K. Briddon at the Presbyterian Hospital. The family history was unimportant. There was no specific history, but three years prior to admission, the patient had been operated on for inguinal adenitis following chancroids. Seventeen months prior to admission he had sustained a slight injury to the right knee. Nine months later he noticed slight pain and swelling in the right knee; this slowly but gradually increased in severity extending a little above the knee. During the last month, the growth had been more rapid. There had been only occasional pain at night, and the patient had been able to work up to within two days.

At the time of his admission to the hospital, the patient was poorly nourished and anæmic. The left posterior cervical glands, both axillary, both epitrochlears and both inguinal chains were palpable. The right inguinal glands were larger than the left. In the right iliac fossa there was a mass the size of an English walnut, just above Poupart's ligament; it was not tender, it moved freely over the deeper parts, and the abdominal wall was

freely movable over it. Apparently, it was an enlarged gland. There was a scar, three inches long, in the right inguinal canal, showing the site of the previous operation.

The lower end of the right femur was much enlarged, being three and a-half inches larger in circumference than its fellow at the same level. The swelling was hard and slightly tender; the skin over it was freely movable; there was no redness nor inflammation of the skin. The tumor was firmly adherent, and incorporated with the femur. Flexion of the right knee was possible to the extent of 80 degrees.

Operation, February 5, 1900. A section was removed from the growth on the outer side of the limb, and by frozen section showed sarcoma. A disarticulation of the hip was then made by Wyeth's pin method. The patient made an uninterrupted convalescence, and left the hospital on the twenty-second day after the operation. There were no signs of a recurrence at the present time, a period of almost six years.

The pathologist, Dr. Thacher, made the following report: "Sections from the projecting part of the tumor, which was not calcified, showed a connective-tissue growth rich in spindle-cells, arranged parallel in strands, with a moderate amount of fibrinous, intercellular substance. Diagnosis, fibrosarcoma."

TUMOR OF THE PAROTID.

DR. F. KAMMERER presented a man, 55 years old, who was operated on four years ago for a carcinoma of the right parotid gland. The tumor soon recurred, and when the patient next came under Dr. Kammerer's observation, in May, 1905, there was a growth about the size of an adult fist, involving the right side of the face and the corresponding ear. It was questionable whether the case was operable or not, but it was finally decided to attempt it.

After ligating the external carotid, the incision was carried upward, and the growth removed as completely as possible, including the entire right ear, and the superficial layers of the mastoid process. Several enlarged lymphatic glands near the angle of the jaw were also excised.

Up to the present time, there were no signs of a recurrence.

A curious feature in connection with the case was that it was

impossible to locate the external opening of the right auditory canal in the cicatrix of the wound. The man was apparently able to hear as well on the affected as on the sound side.

"THE VALUE OF THE DIFFERENTIAL LEUCOCYTE COUNT IN ACUTE SURGICAL DISEASES."

DR. CHARLES L. GIBSON read a paper with the above title (for which see page 485).

DR. HOTCHKISS said that the value of the differential, and the uselessness of the ordinary leucocyte count as an indication of the real severity of a case, was strikingly illustrated in a case of acute phlegmonous cholecystitis a few days ago, where the blood-count showed approximately only 5,000 white blood-cells although the patient's temperature was 107, but the differential count showed 87 per cent. of polyneuclears. Immediate cholecystectomy was followed by recovery.

DR. LILIENTHAL said he had recently listened to a paper on this subject by Dr. Frederick E. Sondern, and since that time he had had a differential blood count made in practically all cases where the diagnosis was not absolutely clear at once, such as fractures, dislocations, and abscesses. He had found that, as a rule, the differential count was of decided value, and with the added advantage of the method described by Dr. Gibson, the difficulties surrounding the diagnosis and prognosis of certain obscure conditions should be still further overcome.

HYDRONEPHROSIS.

DR. GEORGE D. STEWART reported the following case: a girl, aged 17 years, was admitted to St. Vincent's Hospital, August 9, 1905, with the history that when ten years of age she was taken suddenly with nausea, vomiting, pain in head and back; the attack lasting for two weeks; similar attacks followed at irregular intervals, recurring, sometimes as often as once in two weeks After two years she went to the Presbyterian Hospital, where she was subjected to an operation and discharged after a month of treatment, her wound having closed. Two weeks after her discharge, she had another attack of pain, returned to the hospital, remained in bed two weeks and was again discharged. From that

time until her admission to St. Vincent's the attacks kept recurring. Shortly before an attack she noticed she was unable to void urine, and when the attack was over, often passed large quantities. On August 9, 1905, she was admitted to St. Vincent's Hospital suffering from an attack of appendicitis. On the 14th of August her appendix was removed through an inter-muscular incision and the wound was closed without drainage. The appendix was found to be acutely inflamed. She made an uninterrupted recovery. On January 10, 1906, she was readmitted to the wards of St. Vincent's. During the interval since her last operation she had been working in the laundry of that institution. Had had occasional attacks of pain located higher in her abdomen, and neither so frequent nor so severe as those from which she suffered in the summer. On admission she had a temperature of 100.6, pulse of 96, respirations 24; complained of soreness under the right costal border. Examination in this region revealed a large, tender mass, which felt much like a distended kidney. On the day of admission (she was admitted at 1 P.M.), at 5 P.M., she passed five ounces of urine, and at 12, midnight, thirty-two ounces at one micturition; afterward the tumor in the right lumbar region was found much reduced in size. The urine was clear, acid in reaction, gravity of 1011, showed a trace of albumen under microscope, many pus-cells, some blood-cells and much débris; leucocytosis 13,600. Examinations of urine made from day to day showed little variation from the above. No tubercle bacilli could be found either by staining or by inoculation of the guinea-pig. There was present, however, an acid-fast bacillus of unclassified origin. Cystoscopic examination was made by Dr. Keyes, Jr., who reported pus coming from the right ureter and clear urine from the left. No radiographic examination was made. On the 19th of January, the usual lumbar incision for exposing the kidney was made. The kidney was easily exposed, its posterior surface was found markedly adherent to the lumbar fascia, it was three inches below its normal level, the pelvis was very much dilated. The inner surface of the dilated pelvis reached to and beneath the inferior vena cava, the lower border to and over the pelvic brim. In attempting to loosen the kidney from its adhesions, the thin kidney-tissue was torn, and the contents were spilled; as far as could be observed they consisted of

fairly clear urine. In view of the previous operation, of the fact that her left kidney was competent, of the distortion of the pelvis of the right kidney and the difficulty of making any plastic operation which would restore the continuity of the ureter and pelvis, it was decided to remove the right kidney. By very careful dissection the inner margin of the enlarged pelvis was separated from the spermatic vein and the inferior vena cava, the former resting directly upon the latter. After the separation was complete, the renal vessels were tied and here again great care was necessary, as the right renal vein was certainly not more than one-half an inch in length, and any tension on the kidney disturbed the course of the vena cava. The ureter was then ligated at about the pelvic brim and the kidney removed. The patient made an uninterrupted recovery, passing between thirty and forty ounces of urine the days following the operation. An examination of the urine on the 23d showed a normal secretion, except that there were some blood-cells and a few leucocytes present. Examination of the specimen shows that the ureter joins the dilated pelvis on its posterior aspect about two inches from the most dependent portion of the pelvic sac; the ureter turns almost directly upwards for about a quarter of an inch, and then downwards, so that the two limbs of the loop are parallel. At the summit of the loop the calibre of the ureter was considerably narrowed, elsewhere it was absolutely normal.

After the presentation of this case Dr. John Hartwell recalled the case as one in which a nephrorrhaphy had been performed for hydronephrosis.

Dr. Kammerer said that as there was a fair amount of kidney substance left in the specimen shown by Dr. Stewart, he thought an attempt at correction would have been justifiable, although he admitted that in the only well-pronounced case that had come under his care, he had removed the large sac, the walls of which evidently still contained a small amount of active renal tissue. But so much favorable testimony had been given by competent observers for the plastic operations on pelvis and ureter in these cases that he thought they should be tried when a fair amount of kidney substance still remained.

Dr. Ellsworth Eliot said that every effort had been made at the Presbyterian Hospital to find the early history of the case

reported by Dr. Stewart, but it had apparently been carried away by some one for reference, and had not been returned. The speaker thought that Dr. Stewart was quite justified in doing a nephrectomy in this case, basing his opinion upon an analogous case that came under the observation of Dr. F. Tilden Brown and himself in 1897. The case was one of intermittent hydronephrosis which was originally operated on by Dr. Charles K. Briddon, who had opened and drained the dilated pelvis of the kidney. In spite of this free drainage, which continued for a number of weeks through a lumbar incision, the symptoms of urinary obstruction were not entirely relieved, and they persisted even after the introduction of a ureteral catheter into the pelvis, and allowing it to remain there. The recurrent kidney crises were finally relieved by a nephrectomy. Dr. Eliot thought that plastic operations on the ureter or pelvis in these cases were theoretical rather than practical.

Dr. Hartwell recalled a case of intermittent hydronephrosis in a child in which the symptoms were relieved by correcting the kink in the ureter and then anchoring the kidney. He was unable to say whether permanent relief followed the procedure.

Dr. F. Tilden Brown said he thought Dr. Stewart was not only justified in doing a nephrectomy but that he had adopted the only measure that would change the patient's condition from invalidism to perfect health. Leaving out of consideration the anatomical condition that was met with in the adhesions between the pelvis and the inferior vena cava, which had added to the difficultes of the nephrectomy and which would have rendered reposition of the kidney equally difficult and hazardous, the specimen showed that he had to deal with a large dilated pelvis and a small, angulated ureter. To have left the kidney under such conditions would only have proved a source of discomfort and danger to the patient and the speaker said he did not think that any plastic operation would have corrected the deformity.

Dr. Brown said that in a case that came under his observation last summer he exposed the left kidney and found a somewhat similar condition to that reported by Dr. Stewart, but it was not nearly so marked, and he was able to relieve the symptoms by turning the kidney so that the line of exit was

straightened. In the case mentioned by Dr. Eliot ureteral catheterization failed to relieve the symptoms.

EMBOLISM OF THE SUPERIOR MESENTERIC ARTERY, WITH GANGRENE OF THE INTESTINE.

Dr. Parker Syms showed the specimen in this case. The patient was a man, 54 years old, who was admitted to the Lebanon Hospital on January 17, 1906, for a swelling in the submaxillary region, which proved to be an abscess, and was attributed to diseased teeth. The abscess was opened, and the patient was ready to be discharged, on January 23, when he had a sudden attack of abdominal pain, general in character, which subsided without the use of an anodyne. He had a similar attack in the evening, and the following morning he was found dead in the bath-room.

The autopsy showed a chronic endocarditis, and an embolism of the superior mesenteric artery, with gangrene of a portion of the gut. There was no perforation; no peritonitis.

Dr. Syms said he thought the endocarditis was the chief cause of death, probably hastened by a certain degree of sepsis. He did not believe the abdominal lesions were the sole cause of death, because perforation had not taken place and it seemed as though the patient had died of sudden heart failure.